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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Cancelled)

Claim 2 (Previously amended): An isolated and purified DNA sequence that hybridizes to the DNA sequence shown in SEQ ID NOS 3 under high stringency hybridization conditions, wherein said isolated and purified DNA sequence encodes a polypeptide that is a voltage activated calcium channel  $\alpha 2\delta$ -C subunit, and wherein said high stringency hybridization conditions comprises hybridization on a filter support at 65 °C in 7% SDS and 0.125 M sodium phosphate, followed by washing in 1% SDS, 20 mM phosphate buffer and 1 mM EDTA at 65 °C for between about 30 minutes to 4 hours.

Claim 3 (Previously amended): An isolated and purified DNA sequence that consists essentially of the DNA sequence shown in SEQ ID NOS 3.

Claim 4 (Cancelled)

Claim 5 (Previously amended): An isolated and purified DNA sequence that is fully complementary to the DNA sequence shown in SEQ ID NOS 3.

Claim 6 (Previously amended): A recombinant DNA molecule comprising the isolated and purified DNA sequence shown in SEQ ID NOS 3, wherein said isolated and purified DNA sequence encodes a polypeptide that is a voltage activated calcium channel  $\alpha 2\delta$ -C subunit.

Claim 7 (Currently amended): A recombinant host cell comprising a host cell transfected with the recombinant DNA molecule of claim [[6]] 2.

Claims 8-14 (Withdrawn)

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15. (Currently amended) A method for the amplification of a region of the DNA sequence of Claim [[1, 2,]] 2 or 3, said region being desired to be amplified, the method comprising the step of: contacting a test sample suspected of containing the desired sequence of Claim 1, 2, or 3 or portion thereof with amplification reaction reagents, wherein said amplification reaction reagents comprise a pair of amplification primers and wherein said amplification primers each comprise at least 8 consecutive nucleotides of a polynucleotide of SEQ ID NO: 3.

Claim 16 (Currently amended): A diagnostic kit for detecting the presence of at least one copy of the DNA sequence of Claim [[1, 2,]] 2 or 3 in a test sample, said kits containing a primer, a pair of primers or a probe, and optionally amplification reagents.

Claims 17- 20 (Withdrawn)

Claim 21 (Currently amended): A method for purifying  $\alpha 2\delta$ -C or  ~~$\alpha 2\delta$ -D~~ protein from cells, comprising:

- a) transfecting a host cell with a vector comprising the isolated and purified DNA sequence of Claim [[1, 2,]] 2 or 3 operatively linked to a promoter capable of directing gene expression in a host cell;
- b) inducing expression of the isolated and purified DNA sequence in the cells;
- c) lysing the cells;
- d) isolating  $\alpha 2\delta$ -C or  ~~$\alpha 2\delta$ -D~~ protein from the cells ; and purifying  $\alpha 2\delta$ -C or  ~~$\alpha 2\delta$ -D~~ protein from the isolate.

Claims 22- 34 (Withdrawn)

Claim 35 (Currently amended): An isolated and purified DNA sequence ~~encoding~~ consisting of a sequence which encodes a polypeptide of SEQ ID NO: 5.

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Claim 36 (Previously added): An isolated and purified DNA sequence, which comprises a polynucleotide sequence encoding a polypeptide of SEQ ID NO: 5.